JOURNAL OF ORGANOMETALLIC CHEMISTRY VOLUME 461, NUMBERS 1–2, NOVEMBER 30, 1993

Contents

Regular Papers

The preparation of (*Z*)-2-lithio-*ortho*-styryllithium *via* an *ortho*-directed lithiation
A.J. Ashe III and P.M. Savla (Ann Arbor, MI, USA) (Rec'd February 9, 1993; in rev'd form March 22, 1993) 1

The preparation, reactivity, and crystal structure of a 1:1 adduct of dimethylzinc and (−)-sparteine
M. Motevalli, P. O'Brien, A.J. Robinson, J.R. Walsh, P.B. Wyatt (London, UK) and A.C. Jones (Merseyside, UK) (Rec'd March 18, 1993) 5

Electrochemical activation of zinc in the coupling reaction of α-bromoesters with carbonyl compounds
Y. Rollin, C. Gebehenne, S. Derien, E. Duñach and J. Perichon (Thiais, France) (Rec'd January 21, 1993) 9

PM3 study of organometallic radicals formed by elements in periodic Groups 13–16
C. Glidewell (St Andrews, UK) (Rec'd March 17, 1993) 15

Synthese von Galla-3-cyclopentenen und Struktur von $[(3,4\text{-}Me_2C_4H_4)Ga(NEt_2)]_2$
G.E. Herberich, U. Englert und D. Posselt (Aachen, Deutschland) (Eing. den 25. März 1993) 21

Crystal structure of hypervalent silicon compounds. (N → Si)(2-benzothiazolylthiomethyl)trifluorosilane and (N → Si)(2-benzoxazolylthiomethyl)trifluorosilane
Yu.E. Ovchinnikov, Yu.T. Struchkov (Moscow, Russian Federation), N.F. Chernov, O.M. Trofimova and M.G. Voronkov (Irkutsk, Russian Federation) (Rec'd February 28, 1993) 27

Reactions of compounds of the type $(Me_3Si)_2C(SiMe_2C_6H_4Y)(SiMe_2X)$ with trifluoroacetic acid
C. Eaborn, K.L. Jones and P.D. Lickiss (Brighton, UK) (Rec'd March 22, 1993) 31

Siliciumverbindungen mit starken intramolekularen sterischen Wechselwirkungen. LI. Arylisocyanid-Insertionen in Si–Si-Bindungen einiger Vierringe
M. Weidenbruch, E. Kroke (Oldenburg, Deutschland), K. Peters und H.G. von Schnering (Stuttgart, Deutschland) (Eing. den 25. März 1993) 35

Interaction of the (O → Ge)-chelate bis-(lactamo-*N*-methyl)-*cis*-dichlorogermanes with trimethylsilyltriflate. Synthesis of bis-(lactamo-*N*-methyl)-*trans*-(trifluoromethylsulfonyloxy)chlorogermanes
Yu.I. Baukov, A.G. Shipov, L.S. Smirnova, E.P. Kramarova, S.Yu. Bylikin, Yu.E. Ovchinnikov and Yu.T. Struchkov (Moscow, Russian Federation) (Rec'd February 28, 1993) 39

Preparation and properties of molybdenum and tungsten dinitrogen complexes. XLII. Preparation and characterization of W(V) diazoalkane complexes *mer,trans*-$[WX_3(NN{=}CMeR)(PMe_2Ph)_2]$ (X = Br, I; R = Me, Ph) and hydrazido(2 −) complex $[WI_3(NNH_2)(PMe_2Ph)_2]$. X-ray structure of *mer,trans*-$[WBr_3(NN{=}CMePh)(PMe_2Ph)_2]$
H. Oshita, Y. Mizobe and M. Hidai (Tokyo, Japan) (Rec'd February 5, 1993; in rev'd form April 17, 1993) 43

(Dihalogenmethyl)palladium(II)-Komplexe aus Palladium(0)-Vorstufen des Dibenzylidenacetons: Synthese, Strukturchemie und Reaktivität
W.A. Herrmann, W.R. Thiel, C. Broßmer, K. Öfele, T. Priermeier und W. Scherer (München, Deutschland) (Eing. den 25. März 1993) 51

Syntheses and NMR spectroscopic characterisation of transition metal complexes containing the azadiphosphetine ring system $RP(NR')P{=}CR'$ ($R = Et_3C$, $R' = {}^tBu$)
P.B. Hitchcock, R.M. Matos, M.F. Meidine, J.F. Nixon, B.F. Trigo Passos (Brighton, UK), D. Barion and E. Niecke (Bonn, Germany) (Rec'd March 3, 1993) 61

Zur Elektronenstruktur metallorganischer Komplexe der f-Elemente. XXXV. Absorptions- und lumineszenzspektroskopische Charakterisierung von optisch verdünntem $Cp_3Sm(NCCH_3)_2$
H. Schulz, H. Reddmann und H.-D. Amberger (Hamburg, Deutschland) (Eing. den 9. März 1993) 69

Synthesis and crystal structure of two titanasilazanes
Yu.E. Ovchinnikov (Moscow, Russian Federation), M.V. Ustinov (Irkutsk, Russian Federation), V.A. Igonin, Yu.T. Struchkov (Moscow, Russian Federation), I.D. Kalikhman and M.G. Voronkov (Irkutsk, Russian Federation) (Rec'd February 28, 1993) 75

X-Ray analysis of 1-phospha-1,2,3-butatriene as a ligand of carbonyltungsten complex
M. Yoshifuji, K. Toyota, T. Uesugi (Sendai, Japan), I. Miyahara and K. Hirotsu (Osaka, Japan) (Rec'd February 12, 1993; in rev'd form April 7, 1993) 81

Dimeric titanocene hydride–hydridomagnesium chloride and bromide complexes. Crystal structures of the tetramethylcyclopentadienyl derivatives
S.I. Troyanov (Moscow, Russian Federation), V. Varga and K. Mach (Prague, Czech Republic) (Rec'd March 10, 1993) 85

Darstellung und Charakterisierung der kationischen Metallocen-Komplexe $[Cp_2Zr(CH_3CN)_3][AsF_6]_2$ und $[Cp_2NbCl_2][UF_6]$: Laborsynthese von UF_6
A. Schulz und T.M. Klapötke (Berlin, Deutschland) (Eing. den 24. März 1993) 91

A novel approach to the preparation of pentacarbonyl(dialkylaminofluorocarbene)chromium compounds. Confirmation of structure by single crystal X-ray diffraction
J.T. Welch, E.M. Keskeny and P.J. Toscano (Albany, NY, USA) (Rec'd January 20, 1993; in rev'd form March 16, 1993) 95

Half-sandwich aminocarbyne complexes of chromium
A.C. Filippou, K. Wanninger and C. Mehnert (Garching, Germany) (Rec'd March 8, 1993) 99

Synthesis and structural characterization of two molybdenum carbonyl complexes containing dithiocarbamato ligands derived from pyrrolidine and piperidine
K.-B. Shiu (Tainan, Taiwan), S.-M. Peng, M.-C. Cheng (Taipei, Taiwan), S.-L. Wang and F.-L. Liao (Hsinchu, Taiwan) (Rec'd March 5, 1993; in rev'd form April 17, 1993) 111

Synthesis, characterization and crystal structures of $[Mo(CO)_4]_2$TPTA and $[W(CO)_4]_2$TPTA (TPTA = 1,4,8,11-tetrakis-(methyldiphenylphosphino)-1,4,8,11-tetraazacyclotetradecane)
D. Matković-Čalogović, H. Meider and P. Planinić (Zagreb, Croatia) (Rec'd March 25, 1993) 117

Syntheses, structures, and spectroscopic properties of novel sulfurdiimine complexes; spectroscopic properties of the di-t-butylsulfurdiimine (DBSD) complexes $M(CO)_3Br$(DBSD-*N*,*N'*) (M = Mn, Re) and X-ray structures of the metal–metal bonded compounds $(CO)_8Mn_2$(DBSD-*N*,*N'*) and $(CO)_6Mn_2(\mu$-DBSD-*N*,*N'*: *N*, *S*, *N'*)
C. Mahabiersing, W.G.J. De Lange, K. Goubitz and D.J. Stufkens (Amsterdam, Netherlands) (Rec'd January 1, 1993) 127

Protonation of the nitrile ligand *versus* protonation of rhenium at *cis*- or *trans*-$[ReCl(NCC_6H_4R\text{-}4)(Ph_2PCH_2CH_2PPh_2)_2]$ (R = Cl, F, Me or MeO). A mechanistic study
J.J.R. Fraústo da Silva, M.F.C. Guedes da Silva (Lisbon, Portugal), R.A. Henderson (Brighton, UK), A.J.L. Pombeiro (Lisbon, Portugal) and R.L. Richards (Brighton, UK) (Rec'd March 25, 1993) 141

Some rhenium hydride complexes with tetradentate phosphine co-ligands: the crystal structure of $Re(H_2BEt_2)$(*racemic*-tetraphos)
G. Jia, A.J. Lough and R.H. Morris (Toronto, Ont., Canada) (Rec'd January 20, 1993; in rev'd form April 7, 1993) 147

Synthesis and reactivity of the pentamethylcyclopentadienyl iron acetyl complex $[(\eta^5\text{-}C_5Me_5)Fe(CO)(PPh_3)COMe]$
J.-P. Barras, S.G. Davies, M.R. Metzler, A.J. Edwards, V.M. Humphreys and K. Prout (Oxford, UK) (Rec'd February 26, 1993) 157

An unusual epimerization in the diene tricarbonyliron series
J.-P. Lellouche, A. Gigou-Barbedette (Gif sur Yvette, France) and R. Grée (Rennes-Beaulieu, France) (Rec'd January 28, 1993) 167

The reaction of [PPN][$HFe(CO)_4$] with styrene in THF: an unexpected and facile synthesis of $[PPN]_2[Fe_2(CO)_8]$
J.-J. Brunet, D. Neibecker and R.S. Srivastava (Toulouse, France) (Rec'd March 26, 1993) 169

1,1-Dimesityl-1-silacyclopenta-2,4-diene: A stable carbon-unsubstituted silole
M. Kako, S. Oba and Y. Nakadaira (Tokyo, Japan) (Rec'd February 25, 1993; in rev'd form April 17, 1993) 173

A Mössbauer effect and Fenske–Hall molecular orbital study of some sulfur containing organoiron–cobalt clusters
M.L. Buhl and G.J. Long (Missouri-Rolla, MO, USA) (Rec'd November 30, 1992; in rev'd form March 22, 1993) 177

A Mössbauer effect and Fenske–Hall molecular orbital study of the bonding in a series of organoiron–copper clusters
M.L. Buhl, G.J. Long (Rolla, MO, USA) and G. Doyle (Lake Hopatcong, NJ, USA) (Rec'd November 30, 1992; in rev'd form March 22, 1993) 187

Bis(arene) complexes of Ru^{II}. Synthesis, crystal structure and electrochemical behavior of [bis(η^6-*p*-isopropyltoluene)Ru][BF_4]$_2$
S. Suravajjala, J.R. Polam and L.C. Porter (El Paso, TX, USA) (Rec'd December 7, 1992; in rev'd form March 29, 1993) 201

Synthesis, crystal structure and reactivity of $Os_3(CO)_9(\mu_3\text{-}\eta^2\text{-}C_2Ph_2)(\mu\text{-}C(OMe)Ph)$
W.-Y. Yeh, S.-L. Chen (Kaohsiung, Taiwan), S.-M. Peng and G.-H. Lee (Taipei, Taiwan) (Rec'd March 12, 1993; in rev'd form April 17, 1993) 207

Synthesis, structure and solution conformation of some $[(\eta^5\text{-indenyl})(I_{2-n})(R)(L_n)Co^{III}]^{(n-1)+}$ (n = 1, 2; R = perfluoroalkyl; L = P-donor) complexes
Z. Zhou, C. Jablonski and J. Bridson (St. John's, Nfld., Canada) (Rec'd January 11, 1993; in rev'd form March 26, 1993) 215

Complexation of rhodium(I) with hydrophosphorane derivatives of bicyclo[3.3.0]-1-phospha-2,8-dioxa-5-aza-octane
K.N. Gavrilov, I.S. Michel, A.T. Teleshev and E.E. Nifantyev (Moscow, Russian Federation) (Rec'd March 10, 1993) 229

Chlorocarbonyl rhodium(I) complexes with chiral catecholphosphitoamines
K.N. Gavrilov, A.T. Teleshev and E.E. Nifantyev (Moscow, Russian Federation) (Rec'd March 10, 1993) 233

^{31}P and ^{195}Pt NMR studies on fluxional η^1-ligated 1,2,4-triphosphacyclopentadienyl palladium(II) and platinum(II) complexes
J.F. Nixon and G.J.D. Sillett (Brighton, UK) (Rec'd March 25, 1993) 237

Preliminary Communications

P_x ligands with a maximum of electron-donating ability. VI. $[CoCp''(\eta^4\text{-}P_4)\{Cr(CO)_5\}_3]$ ($Cp'' = \eta^5\text{-}C_5H_3{}^tBu_2\text{-}1,3$), the product of the reaction between P_4 and $[CoCp''(\mu\text{-CO})]_2$ in the presence of $[Cr(CO)_5THF]$
M. Scheer, U. Becker (Halle/S., Germany), J.C. Huffman and M.H. Chisholm (Bloomington, IN, USA) (Rec'd May 19, 1993) C1

Synthesis, NMR spectra and X-ray crystal structure of the trinuclear complex $[CH_3C\{CH_2SPtH(PPh_3)\}_3]\cdot CH_2Cl_2$
C.A. Ghilardi, S. Midollini, A. Orlandini, G. Scapacci and A. Vacca (Firenze, Italy) (Rec'd July 7, 1993) C4

Book Reviews C7

Conference Calendar C9

Author Index C12

Subject Index C13